TRISTAR GAS UTILITIES, ING.

195 RAULSTON AVENUE MONTEAGLE, TN 37356

(931) 924-4058

ROOM

ROOM

10 January 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

Dear Mr. Miller:

This letter is a request for you to provide assistance to Tristar Gas Utilities, Inc., an investor owned corporation that was recently incorporated in the State of Tennessee for the purpose of providing gas service to Grundy County. The proposed project is intended to provide piped distribution of natural gas to most of the citizens, businesses and schools of Grundy County and seeks your help to become a gas utility to fulfill that purpose. All questions and instructions should be directed to me, Russell Buchan, at the address and telephone number on the letterhead.

05-00054

128939

The territory to be served embraces all of Grundy County except the Town of Monteagle and that small portion of the County specifically reserved for the Middle Tennessee Utility District. The areas marked on the attached map of Grundy County are excluded from TriStar's requested service

At this time there is no local natural gas distribution service in Grundy County, except in the City of Monteagle, and along the route of the Middle Tennessee Natural Gas Utility District pipeline through the county. The Town of Monteagle natural gas utility serves about 400 customers, of which approximately 150 of them reside in Grundy County, and has shown no intention of expanding. Besides a population of approximately 14,300, Grundy County has five grammar schools, a high school, a number of government buildings and several businesses which would benefit from the availability of natural gas.

Grundy County is among the poorest counties in Tennessee and the residents are in need of the reduced costs of energy provided by natural gas. The lack of natural gas service has been a major deterrent to attracting industry and creating jobs in the county.

There is a thirty plus mile four inch steel pipeline which traverses the county, Connected to Middle Tennessee Utility District at Pelham, the pipeline provides a permanent assured supply of natural gas and acts as a spine to serve transmission and distribution needs of TriStar. Grundy County has within its borders natural gas wells which will provide the initial source of supply.

About 500 to 650 residential equivalents in the Gruetli-Laager area already have gas piping that will permit connection within two months of first gas production. It is projected that users will increase to about 1,000 at the end of the first year and to about 4,000 in four years.

There is no documentation available to us to indicate a desire on the part of any public utility, utility district, or governmental unit in or near the affected area that wants to or intends to provide service to the affected area. In the past fourteen years efforts were made to establish a natural gas distribution system to serve Grundy County but without success. Neither the Town of Monteagle nor Middle Tennessee Utility District made any attempt or showed the desire to serve the County.

There are no known potential or actual competitors to compete with the proposed route plant. line, or system planned by TriStar.

The U.S. Department of Energy each year compares the cost of energy commonly used in American residences. The 2003 cost comparisons for Grundy County are shown below.

Comparison of Cost Upon Completion of Installation

Heat Source	Possible GC Users*	Change To NG	N Gas Probable Users**	Relative Cost of NG	Equivalent User Cost	County % Of Present Cost
Propane	3120	80%	2496	65%	1622	
Heating Oil	153	50%	77	96%	73	
<b>Electrical Strip</b>	821	90%	739	33%	244	
Heat Pump	2435	20%	487	95%	463	
Totals	6529		3798		2402	63%

\*Taken from 2000 Census

\*\*Residential Equivalents

Note: New residents and businesses account for the difference in the 4,000 and the 3798 estimates.

At this time the company plans to retain the services of a pipeline contractor for the express purpose of determining the condition of the existing steel pipeline and the cost of re-establishing its integrity in order to comply with appropriate regulatory and other concerns. Once it is determined that the use of the line can be reestablished, then the company will contract to have the line restored. TriStar will consummate a gas purchase agreement with Middle Tennessee utilizing the existing Pelham tap. Engineering and construction plans have been prepared and prior to commencing the construction of the distribution system TriStar will have those plans updated as necessary.

TriStar Gas Utilities, Inc. is newly formed, has not closed on subscriptions and has no finances at this time.

Following is a summary of the costs of construction of the system. Details are included in the attached Business Plan. Based upon the outcome of the feasibility study, the business plan will be updated using the improved estimates for the costs of renovating the pipeline.

#### **Initial Costs**

Feasibility study, engineering reports and gas line renovation	\$	600,000
Compressors and transmission equipment	•	200,000
Expansion Costs		,
Phase 1 Gruetli-Laager Area		550,000
Phase 2 Altamont, Beersheba		460,000
Phase 3 Palmer		240,000
Phase 4 Tracy City		250,000
Phase 5 Altamont, Pelham, Tracy City		130,000
Total	_	190,000

#### Pro Forma Income Statement for Years 1-5

Total Year 1	RMA	Year 2	Year 3	Year 4	Year 5
	Cash Revenue SIC #	4924			
\$ 420,000	Install	\$1,140,000	\$0	\$0	\$0
\$ 927,197	Gas heat/AC/cooking	\$4,412,616	\$6,620,625	\$6,620,625	\$6,620,625
\$ 91,476	Gas hot water	\$ 353,244	\$ 43,696	\$ 43.696	\$ 43.696
\$1,438,673	Gross Revenue	\$5,905,860	\$6,664,321	\$6.664.321	\$6.664.321
\$ 23,429	Bad debt	\$ 109,615	\$ 153,279	\$ 153,279	\$ 153.279
\$1,415,243	Net Income 100.00%	\$5,796,245	\$6,511,042	\$6,511,042	\$6,511,042

	Cost of Goods Sold				
\$ 173,250	Install Equipment	\$ 470,250	\$0	\$0	\$0
\$ 214,838	Labor	\$ 583,133	\$0	\$0	\$0
\$ 421,453	Gas	\$2,050,734	\$3,009,375	\$3,009,375	\$3.009,375
\$ 60,000	Transmission line fee	\$ 60,000	\$ 60,000	\$ 150,469	\$ 150,469
\$ 8,331	Lost gas	\$ 41.268	\$ 60,188	\$ 60,188	\$ 60,188
\$ 877,872	Total COGS	\$3,205,385	\$3,129,563	\$3,220,031	\$3,220,031
•	rotal COGS	<b>\$3,203,303</b>	<b>\$3,123,303</b>	\$3,220, <del>0</del> 31	\$3,220,03 i
62 03%					
\$537,371	Net Gross Revenue	\$2,590,860	\$3,381,479	\$3,291,010	\$3,291,010
37 97%		<b>4</b> =,000,000	<b>V</b> 0,001,110	<b>40,201,010</b>	<b>4</b> -,,
\$ 62,533	Depreciation	\$ 262,533	\$ 262,533	\$ 262,533	\$ 262,533
\$ 307,316	Expenses	\$ 751,200	\$ 797,194	\$ 797,194	\$ 797,194
21 71%	88 70%	•	-	• ,	
21 / 170	86 70%	00 20 % 00 31	/0 01.70	7/0	070
\$ 230,055	NIBIAT	\$1,839,660	\$2,584,285	\$2,493,816	\$2,493,816
16 26%	11 30%				30%
	NIBT	\$1,399,211	\$2,743,048	\$2,944,157	\$2,944,157
		8 20% 24 14			
45 22%		2.20,0 2111	,2 10		
	ne not adjusted for AIP	* Trans	emission fee and	l age soles cond	accion

<sup>\*</sup> Year 2 income not adjusted for AIP

Prepared by Craig Harston

Small Business Development Center

Chattanooga State Technical Community College

100 Cherokee Boulevard

Chattanooga, TN 37405

It is projected that the initial phase will serve approximately 1,000 customers located mainly in the Gruetli-Lager, Coalmont and Palmer areas. With the expansion phases stated above we expect to serve about 4,000 residential equivalent customers within five years. Estimated customer growth is:

TriStar Gas Utilities, Inc. proposes to finance the initial phases of the project through capital contributions and the expansions through the cash flow that is expected to be generated and/or additional contributions. We are making an initial issue of 500 shares of stock to local investors at \$2,000 per share. Each investor subscribes for shares and is billed according to cash flow needs until subscriptions are filled. Additional shares will be issued if and when needed

The rates that the company expects to charge its customers is equal to or less than the rates the Town of Monteagle and Middle Tennessee utility District charge their customers. TriStar will petition for initial rates indexed on those used by Monteagle Natural Gas Utility District and other Districts on the Plateau. It is anticipated that later TriStar rates based on sufficient operating data will be near the norm for other Plateau natural gas utilities.

Tristar Gas Utilities, Inc. is a for profit corporation registered in accordance with the laws of the state of Tennessee. The initial stockholders of this company are business and civic leaders in the community who are willing and able to fund this project. The distribution system, utilizing the existing pipeline, will be done in phases and it is projected that it will be completed to cover all of the serviceable areas of Grundy County within two to three years. The estimated construction cost of the entire system is expected to be between \$2,000,000 and \$3,000,000.

A business plan that was prepared for the benefit of the company includes a pro forma statement of the projected cost of operating the system for the first five years together with analysis of projected customer growth for the first five years. A copy of the business plan is attached.

<sup>\*</sup> Transmission fee and gas sales concession rates may be subject to negotiation after year 3.

<sup>\*</sup>Will be updated following Feasibility study

The company acknowledges the requirements with respect to the Gas Pipeline Safety Act and

intends to work very closely with Mr. Glynn Blanton, Director of the Gas Pipeline Safety Division,

and his staff, as it relates to the inspection and safety of the distribution system.

TriStar wishes to proceed with its work as soon as possible. We respectfully request your assistance and guidance in granting us the rights to proceed in establishing the transmission and distribution system as expeditiously as possible. Tristar is prepared to answer any and all questions promptly and fully for complete resolution.

The commercial, industrial, and manufacturing base in Grundy County is now limited. Natural gas is much needed in economically distressed Grundy County to give the citizens a less costly and reliable source of energy to their homes, businesses, government buildings and schools, but also to help attract additional employers to this area.

Your assistance in this matter will be greatly appreciated.

Very truly yours,

Registered Agent

CC: Hon. Richard Collier, Legal Department

Glynn Blanton. Director - Gas Pipeline Safety Division

10 January 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

#### Dear Mr. Miller:

This letter is directed to you in support of the TriStar Gas Utilities, Inc. request for your assistance in obtaining the rights to proceed in establishing a natural gas transmission and distribution utility system for Grundy County. I have been a part-time resident of Grundy County since 1931. My efforts to assist in the economic and community development of the county have made me very much aware of the need for such a service by the residents, businesses and government in Grundy County.

It is my intention to invest in TriStar Gas Utilities, Inc., pending the determination of the feasibility of restoring the existing gas line to full service and the approval of TriStar as a utility district. In addition, as a Board Member I will help in any way that my time permits.

I recommend that you help TriStar Gas Utilities, Inc. as requested because doing so will be a major economic benefit to Grundy County.

Sincerely,

Howell E. Glanes, Jr. Howell E. Adams, Jr. Chairman

290 West Wesley Road Atlanta, GA 30305-3528 Phone (404) 355-1677 10 January 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

Dear Mr. Miller

My family moved here 62 years years ago and I have been actively involved in the economy of the area and in the development of the community most of the time since Sadly, the closing of the coal mines and the railroad in early 1980 precipitated a continuing decline in the Grundy County economy that continues to this day

A natural gas utility here will provide new jobs, save heating and other energy costs for residents and businesses, and may stimulate the drilling of new gas wells within the county. I want to see the Grundy County economy grow and provide decent jobs for the many people who now spend about an hour each day commuting to jobs off the Plateau.

The viability of the existing pipeline must be verified and your approval of the application of TriStar Gas Utilities, Inc. for gas utility designation is necessary before further action can be taken. I am seriously thinking of investing in TriStar Gas Utilities, Inc. if the reality of restoring the existing gas line approximates that of their Business Plan.

I urge you to help TriStar Gas Utilities, Inc. as requested. Doing so will be a major benefit to Grundy County.

Sincerely,

Jerry Davenport Board Member

TriStar Gas Utilities, Inc.

PO Box 218

Monteagle, TN 37356

10 January 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

Dear Mr. Miller:

My experience owning and operating several businesses in Grundy County indicates that the costs of heating businesses is often the difference in survival and failure, especially businesses that use gas year round. Chicken houses use about five times the energy each year as a typical residence. Our schools very much need the savings in heating cost and other energy needs that will result from a natural gas utility. My experience in banking taught me that once prospective new businesses learn that natural gas is not available they lose interest in coming here.

There are two steps necessary before TriStar Gas Utilities, Inc. can provide service to customers: a sound gas line must be shown to be affordable and you must approve the TriStar request for utility status, whereupon I expect to invest TriStar.

In any case, I support the desire of TriStar Gas Utilities, Inc. to provide natural gas here and have agreed to serve as a Board Member. Your approval will help me and Grundy County.

Sincerely,

Killy Feutch Kelly Foutch

Sequatchie Concrete Service

PO Box 708

Monteagle, TN 37356

1016 West Main Street, Suite 2

Phone: 931-924-3757

PO Box 489

Fax:

931-924-3759

Monteagle, TN 37356

Email: jwmyers51@blomand.net

10 January 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

Dear Mr. Miller:

Most of my buildings use propane for heating and the lower cost of natural gas will be most welcome. The reduced cost of heating and operating our schools and city-county buildings will directly impact our county taxes or make more money available for much needed infrastructure. I have talked with a number of prospective employers interested in coming to Grundy County who immediately lost interest upon learning that natural gas is not available.

TriStar Gas Utilities, Inc. has indicated that the viability of repairing the existing gas pipeline must be verified and your approval of its request for utility status is necessary for making natural gas available. I urge you to approve their request in view of the obvious need of the citizens of a very poor county. I am very seriously considering investing in TriStar, pending your approval of its application for gas utility status.

Sincerely,

Jim Myers

President



Post Office Box 69 Pelham, Tennessee 37366

10 January 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

Dear Mr. Miller:

I own Freedom Tree Farms in Pelham, Grundy County and am familiar with the economic needs of this county. Our residents, businesses and schools very much need the savings in heating cost and other energy needs that will result from a natural gas utility. In addition, the possibility for new economic development will be much improved.

Once the feasibility of restoring the existing gas line to full service is verified and your approval is obtained, I will seriously consider an investment in TriStar Gas Utilities, Inc. I expect to benefit both from my investment and from reduced heating costs.

I support the desire of TriStar Gas Utilities, Inc. to provide a natural gas utility here and have agreed to serve as a Board Member. Your approval will help me and Grundy County.

Sincerely,

Dale Bryan President

## Citizens Tri-County Bank

ALTAMONT Highway 56 PO Box 196 Altamont, TN 37301 (931) 692-3221

**DUNLAP**37 Rankin Ave North
PO Box 697
Dunlap, TN 37327
(423) 949-2173

JASPER 4765 Main Street Jasper, TN 37347 (423) 942-1990

MONTEAGLE 14 College St PO Box 399 Monteagle, FN 37356 (931) 592-2741

PALMER Highway 108 PO Box 130 Palmer TN 37365 (931) 779-3288

PIKEVILLE 318 North Main St PO Box 409 Pikeville, TN 37367 (423) 447-2107

SIGNAL MOUNTAIN 1306 Taft Highway Signal Mountain, TN 37377 14231 886-2868

SOUTH PITTSBURG 402 N Cedar Ave South Pittsburg, TN 37380 (423) 837-8645

TRACY CITY 416 Railroad Ave PO Box 10 Tracy City, TN 37387 (931) 592-2741

TRACY CITY Oak & Coylar St PO Box 637 Tracy City, TN 37387 (931) 592-9221

WHITWELL 14087 Highway 28 PO Box 939 Whitwell, TN 37397 (423) 658-5880 January 11, 2005

M. Patrick Miller, Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

Dear Mr. Miller:

I am writing to you in support of the TriStar Gas Utilities, Inc. efforts to establish a natural gas utility system for Grundy County. I am a life long resident of Grundy County and I feel there is a great need for such a service. The benefits to the residents and businesses of this county would be tremendous.

I have been in the banking industry in this county for the past thirty years and I feel that natural gas would attract the much needed industry in this area and would certainly benefit our residents with service and creation of jobs.

Please call me if I can offer any assistance.

Sincerely yours,

Karen Hutcheson, Vice President

Citizens Tri-County Bank

Highway 56/ Cumberland Street

Altamont, TN 37301 (931-692-3221)

www.citizenstricounty.com

#### Big Creek Utility District

P.O. Box 160 Altamont, TN 37301

January 11, 2005

Mr. Pat Miller Chairman Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243

#### Dear Mr. Miller:

Big Creek Water Utility District expects to work with Tri Star Gas Utilities, Inc. for our mutual benefit but especially for the benefit of Grundy County. My experience in working with the citizens of Grundy County regarding water utilities gives me insight into their ability to afford natural gas. I, personally, want natural gas and am of the opinion that most people want the cost savings that come with it. There is no doubt that new businesses and industries insist on the availability of natural gas and Grundy County almost desperately needs new employers.

Our goals are complementary and, therefore, intend to share whatever information about utilities that is of value to Tri Star that I have. I strongly support the award of a natural gas utility to Tri Star Gas Utilities, Inc. Your approval will be a great service to Grundy County.

Sincerely,

Allen Joslyn General Manager

## A BRIEF BUSINESS PLAN

**FOR** 

# A NATURAL GAS UTILITY DISTRICT

IN

## GRUNDY COUNTY, TENNESSEE

JUNE, 2004

PREPARED BY
CRAIG HARSTON
SMALL BUSINESS DEVELOPMENT CENTER
CHATTANOOGA STATE TECHNICAL COMMUNITY COLLEGE
100 CHEROKEE BOULEVARD
CHATTANOOGA, TN 37405

AND ASSISTED BY RUSS BUCHAN IC HOPE TRACY CITY, TN 37387

#### **EXECUTIVE SUMMARY**

One result of renewed interest and sustained efforts at economic growth is recognition of the need for a functional natural gas utility district (District) to replace the existing Utility District that has never tried to provide natural gas to Grundy County

The District will function as a natural gas service provider with three sources of natural gas available

- Grundy County has within its border more than 50 natural gas wells that will provide an initial lower cost source of supply for the District. The recommendations that follow however, are based solely on the rates of cross country suppliers,
- 2. A thirty one mile long four inch steel pipeline is connected to the cross country Middle Tennessee Natural Gas pipeline in Pelham and terminates in Gruetli-Laager. This asset can become the spine of the utility district's transmission and distribution needs and will permit activating customers quickly.
- 3. A second cross country pipeline belonging to East Tennessee Natural Gas passes through Monteagle and near Tracy City and can be brought on line when needed.

There is no natural gas service in Grundy County, except in Monteagle. The interstate distribution systems will provide economic, environmental, reliability, and physical advantages and benefits to the users. The 70% of residents and businesses that convert from propane gas to natural gas will enjoy a reduction in heating costs of about 30%. Establishing the integrity of the existing pipeline and securing its long-term use is vital to the District's economic viability.

Recommendations. The District should secure a source of product in the following priority:

- Determine the cost of refurbishing the existing pipeline and the purchase of the necessary compression-transmission equipment;
- Conduct a feasibility study to determine the projected amount and quality of natural gas available from the existing gas wells. It is expected that a positive outcome will result;
- Secure the right to use the existing pipeline through negotiations with the owner and connect with Middle Tennessee Natural Gas through the Pelham tap;
- Arrange for the establishment of the integrity of the existing pipeline in order to comply with regulatory requirements and negotiate its leasing;
- Establish and staff a private Natural Gas Utility District to serve the areas of Grundy County where natural gas is not now available;
- Provide taps for as many homes and businesses in the Gruetli-Laager area as possible as quickly as possible to generate positive cash flow;
- Provide for a loop, to stabilize gas pressure throughout the distribution system, to the
  existing pipeline via another tap site with Middle Tennessee Natural Gas or with East
  Tennessee Natural Gas;
- Complete the construction of a distribution network throughout Grundy County as defined in Part IV, Operations.

The cash flow analysis model used indicates that the before tax return on investment will be over 20%. It is recommended that the necessary investment required be obtained and operation begun.

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#### I. INTRODUCTION

#### A. <u>Legal Description</u>

The proposed District of Grundy County, Tennessee includes all of Grundy County, Tennessee, except the Town of Monteagle and that portion of the County that is specifically reserved for the Middle Tennessee Utility District. The Towns of Altamont, Beersheba Springs, Tracy City, Gruetli-Laager, Palmer, and Coalmont are the incorporated towns within said territory. Another populated area, Pelham, is also within the service area.

#### B. Service Area Profile and Geography

Natural gas services are now available to some 1,500 of the approximately 14,050 county residents. Because of the topography, the majority of the county's population is located in six incorporated areas and two others. The roads that connect the population can be used to lay gas line piping. The area to be served is mountainous. The homes are often some distance apart. In addition to populated areas, the county has six grammar schools, a high school, and several businesses which will benefit from the availability of natural gas.

The commercial, industrial, and manufacturing base in Grundy County is limited. The availability of natural gas will help to attract additional business and industry and create local jobs. Secondly, natural gas is the cleanest, most environmentally accepted major energy source. It is abundant and economical.

#### C. Population

Grundy County has shown decreased population from 1980 through 2001. Following is the census history for the county's population through the year 2003. The county has shown a small net increase in population with further growth expected. The availability of natural gas will greatly enhance the ability to attract employers and to retain or accommodate expansion needs of existing employers.

PROJECTIONS								
1950	1960	1970	1980	1990	*2000	*2001	2002	2003
12,558	11,512	10,631	13,787	13,362	12,864	12,246	13,000	14,050
	-8.3%	-7.7%	+29.7%	-3.1%	-3.7%	-4.8%	+6.1%	+8.7%

<sup>\*</sup>Prepared by the Department of Sociology, University of Tennessee: Tennessee Department of Health, Division of Information Resources

#### D. Marketing and Customer Profile

Grundy County's 14,050 residents comprise 4,550 households. A primary industry is poultry production. A variety of fuel is presently being used to heat these households and poultry farms, as well as other businesses and public facilities. The U.S. Department of Energy each year compares the cost of energy commonly used in American residences. The chart below describes the fuels that are now used in the absence of natural gas, the extent of their use, and their cost compared to the \$5.52 for natural gas.

Fuel	Popularity	Cost Per Therm	Cost Vs. NG	Comments
LPG (Propane)	53%	\$7.88	43% Higher	Delivery & Bulk Storage Required
Oil	11%	\$5.62	2% Higher	Delivery & Bulk Storage Required
Electric Strip	12%	\$22 57	300% Higher	Extremely Expensive
Heat Pump	6%	\$5.80	5% Higher	Uncomfortable, Expensive Maintenance
Other	18%	Wood, coal		

As has been evidenced in many areas, the introduction of natural gas is usually heralded by the community, and the conversion rate is high. The chart below depicts the expected conversion rate for Grundy County. In order to provide a common denominator, businesses and industries have been converted to residential equivalents. Virtually all of the poultry farms use LPG for heating, for example, and each poultry house represents the equivalent heating requirements for about five residences.

Heat Source	Total Users	Conversion Rate	Residential Equivalent Users
LPG	3300	90%	2970
Oil	680	85%	580
Electrical Strip	770	75%	575
Heat Pump	360	35%	125
Wood/Coal	1,140	10%	125
Totals	6,250	69.8%	4,375

The creation of the District will allow the unused natural gas wells in the county to be put into production and stimulate new drilling. Gas from these wells used to heat the schools will reduce the county's current heating cost by about 30%, thereby affecting the tax base.

In addition to the cost benefits, reliability and convenience benefits include no outage of fuel when roads are iced, no unsightly tanks and better safety. The availability of natural gas service will greatly enhance economic development opportunities for the county. A formal advertising campaign extolling these benefits should be undertaken well before tapping in customers can begin

#### II. PROCEDURE

The project is intended to provide piped distribution of natural gas to the maximum number of citizens of Grundy County and will take place in five phases.

#### A. SOURCE OF NATURAL GAS

There are three available natural gas sources available to the District within the service area: Middle Tennessee Utility District, East Tennessee Gas (Tenneco), and a developed gas well field. The first two sources are available through cross country pipelines which exist in the south and southwest part of the county. A privately owned pipeline connects the main line in Pelham to the well field in and near Gruetli-Laager.

There are no recent operational records for the existing natural gas wells. There are records that show that during the late 1970's and early 1980's there was enough gas produced by 10 wells to sell to the Middle Tennessee Utility District. This is an indication that there is enough natural gas available to provide for the initial service needs of the District.

The first step is to secure right to use an existing four inch steel pipeline, made sound, so that natural gas may be pumped to and from the well field.

- 1. Determine the condition of the pipeline.
- 2. Make any repairs or modifications necessary to ensure that integrity and safety concerns are satisfied. The line should be tapped at locations where future local distribution systems can be served without interruption of service.
- 3. Given positive outcomes in steps 1. and 2., the pipeline must be repaired in order to connect to the cross country pipeline;
- 4. Conduct a study to estimate the amount and quality of natural gas available from existing wells. A positive result is expected;
- 5. Negotiate with Mr. Af Srouji, pipeline owner, and enter into a long term usage agreement for use of the existing 4" steel pipeline for transmission purposes;
- 6. Establish an agreement with Middle Tennessee Natural Gas to reopen the existing connection in Pelham.
- 7. Negotiate for a future tap into the East Tennessee Natural Gas system near Tracy City.
- 8. Negotiate for purchase of locally produced natural gas.

Three independent sources of supply assure the security of operations for the customers of the District.

#### B. <u>DISTRIBUTION</u>

Distribution is the transmission from a source(s) to the local pipeline network and local pipeline delivery of natural gas product to the user.

Transmission. By building a natural gas utility district around the existing gas pipeline and gathering system, all additional lines can be built along highway rights-of-way. By utilizing the existing line, a large initial capital cost can be avoided and lease costs can be based on usage.

Local Pipeline Network. Local distribution must be installed by the District. By utilizing roadway and other existing rights-of-way, for purposes of installing its distribution system, District accomplishes at least two benefits.

- Most users, residences, government and business, are generally located with road or street frontage so that accessibility is greatest with roadway right-of-way occupancy.
- 2. Use of previously disturbed areas, such as road rights of way, minimizes local and EPA concerns.

#### **II. FINANCIAL MANAGEMENT**

Funds are needed to refurbish the gas supply with some well heads, tubing, valves, regulators, meters, drip tanks or separators (which bleed off oil and water condensates) as well as piping. The long distance pipe to the Middle Tennessee Gas Company requires repair and testing.

The studies called for in Section II - SOURCE Steps 1-3 are expected to cost about \$100,000. These evaluations will require three to four weeks. Estimates of the cost of the pipe repair ranges between \$250,000 and \$500,000 with about one month to completion.

Phase 1 of the venture will require an investment of \$600,000 or more to install the one inch and larger distribution pipe lines. Users will pay for individual connections to businesses and homes from the street. As these are put in place, installation of meters (tapping in) can begin. Installation fees will be in the \$350-\$400 range. Should all these fees be paid in cash, an immediate substantial income will be generated. However, considering the economic condition of Grundy County, it may be necessary to include monthly payments for installation with the gas bill, thus spreading the money over as much as one year.

Start Up. Top management can result from a temporary consultant or by hiring a CEO. The CEO, an Office Manager-Bookkeeper and advertising need to start as soon as the existing line is declared salvageable and the District is formalized. The acquisition of supplies and equipment, such as compressor(s), computers, software, service vehicles and facilities need to begin at this time.

One two person meter installation crew needs to be hired and trained prior to the planned start of meter installation. Each crew can install about two meters per day. Once the rates of installation of distribution lines is known, additional meter crews can be contracted to keep meter installation on pace with distribution line installation.

Investment Analysis. It is estimated that revenue will begin within one month of pipeline repair completion. The District will have an estimated 560 customers in the Gruetli-Laager area within one year and about 4,000 District customers in five years.

The pro forma income statement that follows paints a picture of the cash flows over the first 12 months and the next four years. It indicates a positive cash flow in about one year that steadily increases thereafter. In summary, the model predicts a sound investment.

Risk. There are several associated risks with this venture. The financial value is affected by the price/cost of natural deep well methane gas. Some think that this source of gas is inferior and may command a lower price. Some wells may produce for decades while others may produce for only weeks. The quality of the gas in some wells may be inconsistent or generally poor quality with toxic or inert contaminates that require expensive filtering and clean up of the gas product. Known quality from periods of past production suggest that the gas is good quality without contaminates.

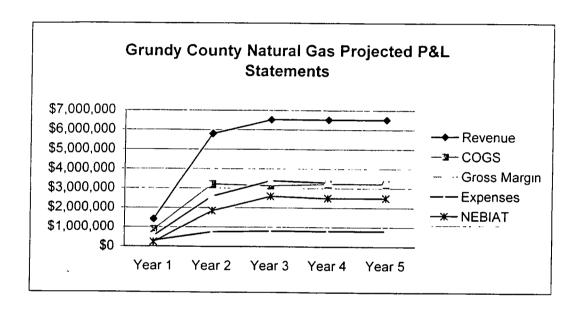
However, the cost/price estimates used in this document assumes all purchases are from interstate suppliers and the recommendations do not consider the availability or cost of local natural gas which, if available, would improve the rate of return prospects considerably.

If additional successful wells are drilled, this result will suggest that five year projections will be much higher. Such production is sustained in other counties along the same geological formation associated with the Central-South Cumberland Plateau.

If the actual conversion rate is less than the estimated rate the return will occur more slowly. Only a major shortfall below the estimated total number of residential equivalent uses will make the venture unprofitable.

#### Performa Income Statement

	Year 1	Year 2	Year 3	Year 4	Year 5
Revenue	\$1,415,243	\$5,796,245	\$6,511,042	\$6,511,042	\$6,511,042
cogs	\$877,872	\$3,205,385	\$3,129,563	\$3,220,031	\$3,220,031
Gross Mar	\$537,371	\$2,590,860	\$3,381,479	\$3,291,010	\$3,291,010
Expenses	\$307,316	\$751,200	\$797,194	\$797,194	\$797,194
NEBIAT	\$230,055	\$1,839,660	\$2,584,285	\$2,493,816	\$2,493,816



#### **V. THE IMPLEMENTATION PLAN**

The District will ultimately provide natural gas service throughout its service area. Initially, it will service Gruetli-Laager and individuals along the pipeline and expand from there as described below.

While the five Phases outlined below are numbered, Phases 2-5 can be done in any order The decision should be based on the probability of reaching the most customers in the least time.